

Notice of Allowability**Application No.**

10/052,621

Examiner

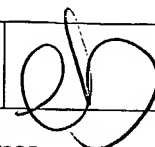
Kevin M Bernatz

Applicant(s)

LIN ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 7/22/04.
2. ☒ The allowed claim(s) is/are 53-63,65-85,87-90,92-106,108-112,114-117,119-126 and 129-136.
3. ☒ The drawings filed on 17 January 2002 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 07232004 .
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

Election/Restriction

1. Claims 53, 84 and 106 are generic and allowable. Accordingly, the restriction requirement as to the encompassed species is hereby withdrawn and claims 79 – 81, 103 – 105 and 123 – 125, directed to the non-elected species are no longer withdrawn from consideration since all of the claims to this species depend from or otherwise include each of the limitations of an allowed generic claim.

In view of the above noted withdrawal of the restriction requirement as to the linked species, applicant(s) are advised that if any claim(s) depending from or including all the limitations of the allowable generic linking claim(s) be presented in a continuation or divisional application, such claims may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Once a restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. See *In re Ziegler*, 44 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

Examiner's Amendment

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

3. Authorization for this examiner's amendment was given in a telephone interview with Douglas Swartz on July 22, 2004.

The application has been amended as follows:

- The abstract has been amended as follows: after last line: the phrase:
“J:\3123\297\CLEAN\patent application.dws.frm” has been deleted.
- Claim 53, last line: after “location”, the following phrase was inserted: “and the underlayer has a thickness that decreases from an inner radial location of the disk to an outer radial location of the disk”;
- Claim 63, line 1: “53” was changed to “54”;
- Claim 64 was cancelled;
- Claim 66, line 1: “53” was changed to “54”;
- Claim 84, line 2: “and” was deleted;
 - Line 4: “inner” was replaced with “innermost”;
 - Line 5: “outer” was replaced with “outermost”;
 - Last line: after “location”, the following phrase was inserted: “; and (c) a protective layer located above the information layer”;
- Claim 106, line 4: between “first” and “radial”, the word “innermost” was inserted;
 - Line 5: the phrase “, different” was replaced with “outermost”;
- Claim 113 was deleted;
- Claim 114, line 1: “113” was replaced with “106”;
- Claim 115, line 1: “113” was replaced with “106”;
- Claim 116, line 1: “113” was replaced with “106”;
- Claim 118 was deleted;

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- Claim 119, line 1: "118" was replaced with "106";
- Claim 123, line 1: "107" was replaced with "108";
- Claim 124, line 1: "107" was replaced with "108";
- Claim 125, line 1: "107" was replaced with "108";
- Claim 126, line 1: "53" was replaced with "54";
- Claims 127 and 128 were cancelled;
- Claim 134, line 5: before "first radial", the word "the" was replaced with "a";
 - Lines 5 – 6: before "second radial", the word "the" was replaced with "a";
- Claim 135, line 4: before "first inner", the word "the" was replaced with "a";
 - Line 5, before "second outer", the word "the" was replaced with "a".

Reasons for Allowance

4. The present claims are deemed allowable over the references of record since the references of record fail to disclose or render obvious the claimed combinations of variation in properties and/or underlayer plus magnetic layer thickness values.

While the prior art of record disclose magnetic layers and underlayers varying in thickness, as well as properties which vary radially, the prior art of record fail to teach or render obvious any of the following claimed combinations:

- the combination of two recording parameters which vary inversely radially outward and an underlayer which has a thickness that decreases radially outward;

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- the combination of an information layer which has a thickness which *increases* radially outward and an underlayer which *decreases* radially outward; or
- the combination of a coercivity which *decreases* from an innermost radial location to an outermost radial location with a magnetic moment that *increases* from an innermost radial location to an outermost radial location.

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

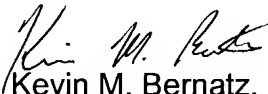
Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin M Bernatz whose telephone number is (571) 272-1505. The examiner can normally be reached on M-F, 9:00 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Thibodeau can be reached on (571) 272-1516. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Kevin M. Bernatz, PhD
Primary Examiner

July 23, 2004